A Conservative Physical Therapy Approach after Subacromial Decompression and Labral Debridement in a Young Former Competitive Gymnast: A Case Report

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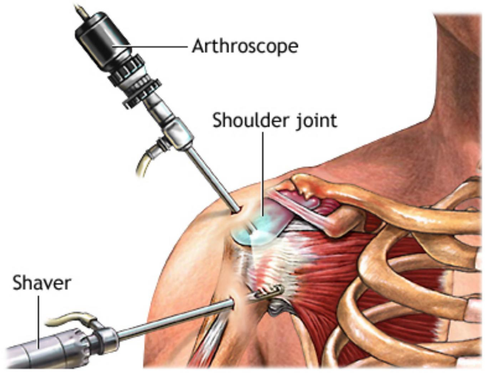
Background

Subacromial impingement syndrome is a musculoskeletal condition characterized by:
- Shoulder pain
- Altered glenohumeral kinematics

Conservative treatment can include:
- Physical therapy
- Corticosteroid injections

Surgical option includes subacromial decompression (SAD)
- Most patients who undergo SAD are approximately 50-60 years old
- There is little to no evidence regarding rehabilitation of young, healthy individuals following SAD



http://www.medeguru.com/orthopedics/arthroscopy/shoulder/

Purpose

The purpose of this care report was to investigate the conservative protocol of a young, healthy gymnast who underwent SAD and rotator cuff [RC] surgery.

Case Description

- 23 year old female
- Recently retired gymnast
- Two part-time jobs: retail and administrative work
- SAD and labral and RC debridement performed on left shoulder

Examination

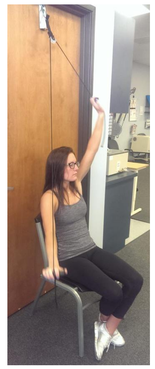
Impairments	Functional Limitations	Disabilities

• Decreased L UE ROM:
  • 88° forward flexion (passively)
  • 34° external rotation (passively)
• Decreased L UE strength
• Increased muscle tone of L UE
• UEFS: 3/80
• Pain, tenderness, sensitivity
• Decreased mobility
• Minimal L UE muscle atrophy
• Portals – no signs of infection
•Minimal swelling and bruising
• *R UE within normal limits*
	•Dependence or required assistance with most ADLs
	• Difficulty with sleeping
	•Unable to reach arm behind back
	•Decreased activity tolerance
	•Difficulty with functional mobility and activities
		• Unable to work
		• Limited school participation
		• Unable to exercise

Interventions

CC was seen for 45 minutes sessions, 2-3 times per week for 10 weeks. The primary focus was to reduce pain and improve ROM, strength, and functional ability in order to return to sports.

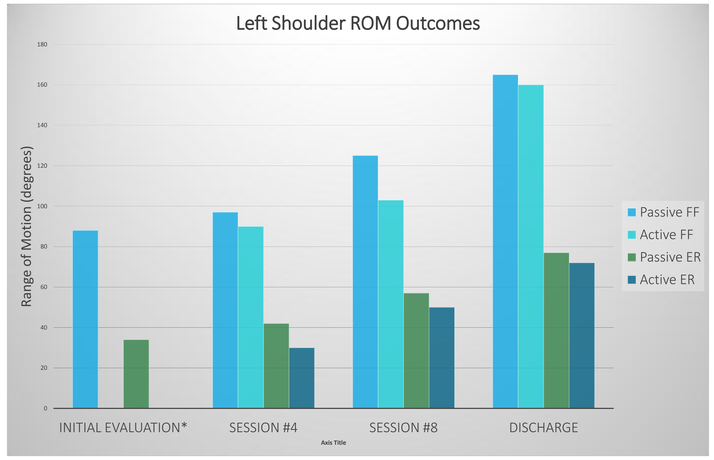
Interventions included:
- Therapeutic exercises
- Stretching with PROM and AAROM
- Strength training
- Functional activities/mobility
- Modalities for pain management
- Manual therapy
- Body/posture re-education
- Joint mobilizations
- Soft tissue mobilization
- Home exercise program


	Time Frame	Goals
Phase I	Immediately post-op through 10 days post-op PT 2x a week[BiW]/3x a week[TiW] Home exercise program [HEP] 2x daily	Reduce swelling 150° passive FF Full passive ER Deltoid and RC isometric set
Phase II	10 days to 4 weeks post-op PT BiW/TiW HEP daily	Full passive elevation Good isometric deltoid and RC contraction
Phase III	4-8 weeks post-op PT weekly Exercise in health club or home gym TiW	Regain full AROM Restore full active and passive IR Restore normal ADL function Increase strength
Phase IV	8-20 weeks post-op PT weekly Exercise in health club or home gym 5xwk	Normal strength Gain proprioception to return to sport

Outcomes

Improvements were observed in left shoulder AROM and PROM, strength, pain, and functional outcomes.
- Compared to right, left shoulder achieved full ROM
- L shoulder strength was at least a 4+/5 for all MMT
- Pain improved from 5/10 to 0/10
- UEFS score improved from 3/80 to 72/80



Discussion

Outcomes indicated that SAD, labral and RC debridement followed by conservative physical therapy treatment were successful for a young, athletic patient with subacromial impingement syndrome. More research is needed to investigate an aggressive protocol to return high-functioning patients back to their sport.

Acknowledgements

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References

For references, see full case report at UNE Dune.